Programme Area: Buildings

Project: Building Supply Chain for Mass Refurbishment of Houses

Title: Appendix 5 – Workshop Presentation 12th July 2011

Abstract:

Please note this report was produced in 2011/2012 and its contents may be out of date. This document is an appendix of Deliverable 4.2 – Draft Supply Chain Scenarios.

Context:

This project looked at designing a supply chain solution to improve the energy efficiency of the vast majority of the 26 million UK homes which will still be in use by 2050.It looked to identify ways in which the refurbishment and retrofitting of existing residential properties can be accelerated by industrialising the processes of design, supply and implementation, while stimulating demand from householders by exploiting additional opportunities that come with extensive building refurbishment.The project developed a top-to-bottom process, using a method of analysing the most cost-effective package of measures suitable for a particular property, through to how these will be installed with the minimum disruption to the householder. This includes identifying the skills required of the people on the ground as well as the optimum material distribution networks to supply them with exactly what is required and when.

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Whole House Retrofit For Thermal Efficiency.

"The European Experience"

Paul Cook 12th July 2011

Total Flow Ltd.

The Whole House Retrofit Project

The Project is split into 6 work packages with the overall objective of developing an effective, comprehensive and compelling proposition for whole house retrofit for energy efficiency.

Work packages

1 and 2 Housing stock and energy performance modelling

3 Design of appropriate measures

4 Supply chain development

5 Customer engagement

6 Regulation and legislation

WP 4.2 Measures

Scope of measures

Intervention Scope	Measures
Primary	Primary heat source (boilers, heat pumps) Wall, floor, loft, roof insulation Windows and doors
Secondary	MVHR ventilation systems Solar Thermal systems Energy management systems Electric showers
Tertiary	Decoration products Trade supplies Low energy lighting

Summary of WP 4.0 and 4.1

Work Package 4.0 delivered a summary of the existing supply chain

Work Package 4.1 delivered :

- Draft Value propositions for 10 customer segments
- Draft “Ideal state” supply chain design to deliver the needs of mass scale whole house retrofit.
- Gaps between the ideal and current state supply chains
- Contrasts with France and Germany
- Lessons from previous national roll out programmes

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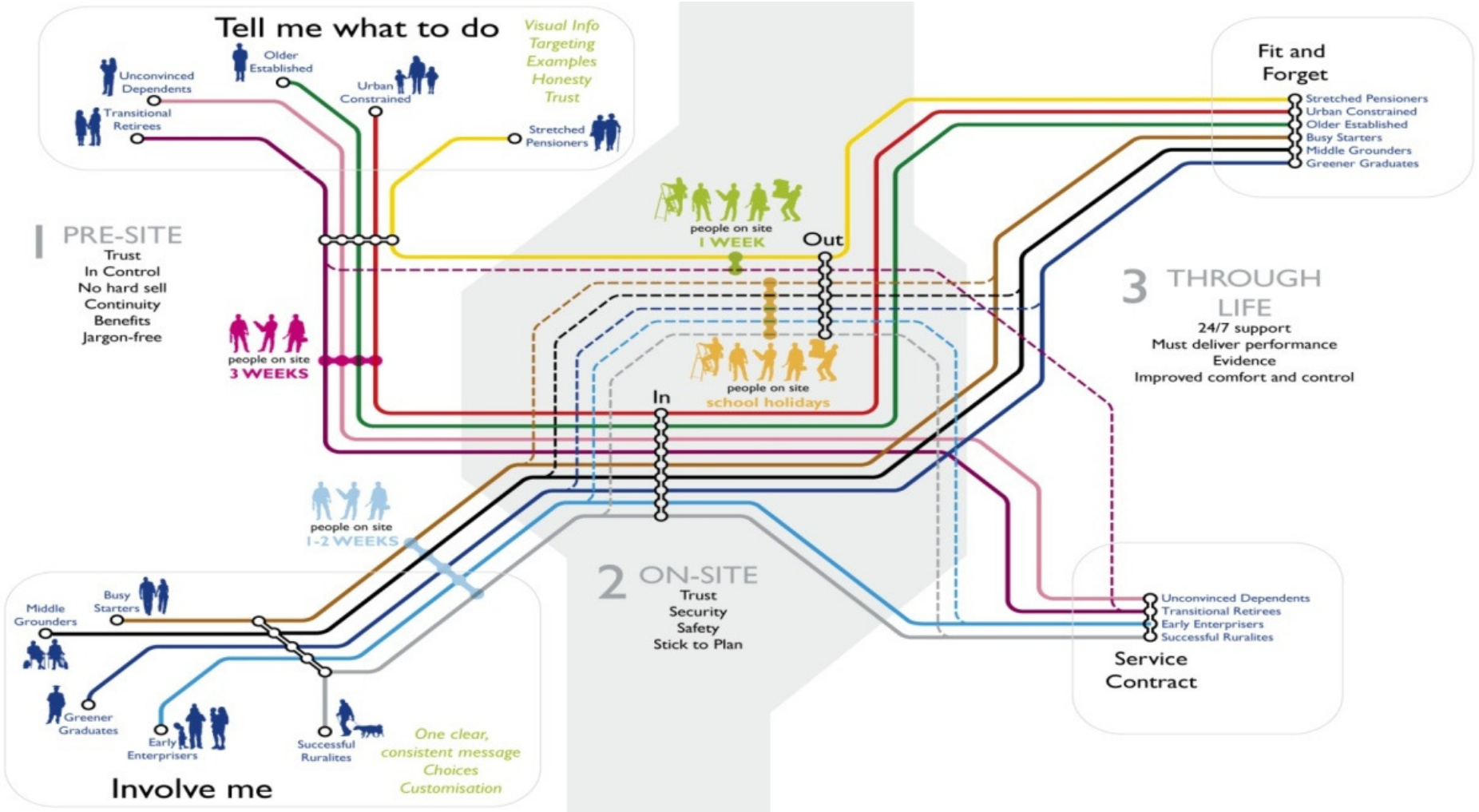
Retrofit Value Proposition Synergies



WP 4.1 Highlights

Key ingredients to a successful value proposition

- Trusted brand / delivery / support is essential – Single provider
- Disruption must be minimised – one team for installation
- Evaluating potential for energy savings - visible / measurable benefits
- linking retrofit to other value adding works in the home (ie. Loft conversion)
- Providing information to customer and the supply chain
- Providing robust standard work for retrofit works - no surprises

?Questions for today?

For France and Germany,

- How are customers engaged?
- How does the Retrofit process work?
- What is easy / works well ?
- What is difficult or time consuming ?
- What problems occur after the survey ?
- What work can or has been externalised ?
- Where are there opportunities for new products, processes and methods

!Our Challenges !

- Whole House survey < 4 hours
- Whole House retrofit Installation < 1 week
- With experience from France and Germany, how can this be achieved ?
- What will prevent this being achieved?
- Where are the opportunities?

“Your input please”
The Survey

For Customer engagement and the Survey Process:

What has worked well ?

What is difficult or time consuming ?

What new equipment, processes or methods are required?

What work has, or can work be externalised to speed up the survey and minimise disruption?

Consider this for assessing:

Replacement windows and doors.

External wall insulation

Room in roof

Extensions

Internal wall insulation

Roof insulation (Cold and warm roof)

Floor insulation

Cold bridges

Ventilation

Installation Process

For the Installation Process:

What has worked well ?

What is difficult or time consuming ?

What new products or processes are required?

What work has, or can be externalised to speed up installation and minimise disruption?

Consider this for:

Replacement windows and doors.

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Through life support

For through life service and support

- What has worked well ?
- What challenges are there ?
- What areas of retrofit give problems over their life?
- What Lessons about customer support have been learned?

Supply Chain

How has the supply chain reacted to whole house retrofit ?

- New entrants to the industry
- New skills and flexibility / new training schemes / qualifications
- New / improved products and services
- Improved methods
- Accreditation
- Finance and warranties
- Reaction from finance and insurance sectors

Review

- Review of the day and Comments.

Thank You